

ABSTRACT

The present invention provides for indexing of occurrences of a value in at least one data record using a bit vector wherein a bit vector is associated with the value and a bit of the bit vector representation is associated with the at least one data record, a determination is made whether the value exists in the at least one data record, a bit value is assigned to the bit in the bit vector representation based on the outcome of the determination. Further, operations may be performed on multiple bit vectors indexing data records and values used in the data records to determine the existence of combinations and associations between the corresponding values and the indexed data records.